

What is claimed is:

1. An apparatus for facilitating movement of a work piece, relative to a position for the work piece to be affected by a process station, the apparatus comprising:

5 a mount for a work module, the mount capable of coupling to said work module, wherein said work module is configured to accommodate fluid flow while said work piece is being affected by said process station;

a guide coupled to said mount, said guide configured to guide motion of said mount relative to said process station, said process station having a first side and an opposite

10 second side, and said mount to move toward said process station externally from said first side, and said mount to move away from said process station externally from said first side.

2. An apparatus according to claim 1, wherein said process station comprises a furnace.

15 3. An apparatus according to claim 2, wherein said furnace is a bench-top laboratory furnace.

4. An apparatus according to claim 1, wherein said process station comprises a
20 furnace, said furnace includes an elongated heating chamber for accepting said work module, and said first and second sides of said process station correspond to two opposite ends of said elongated heating chamber.

5. An apparatus according to claim 1, further comprising a pre-treatment or post-
25 treatment unit configured to be capable of affecting said work module while said work

module is coupled to said mount, while said work module is not in ideal position for being affected by said process station.

6. An apparatus according to claim 5, wherein said pre-treatment or post-treatment
5 unit comprises at least one fan, said at least one fan capable of cooling said work module.

7. An apparatus according to claim 6, further comprising a shield configured to deflect airflow from said at least one fan.

10 8. An apparatus according to claim 1, further comprising said work module.

9. An apparatus according to claim 1, wherein said work module comprises a quartz tube.

15 10. An apparatus for affecting a work piece, said apparatus comprising the apparatus for facilitating movement according to claim 1, said apparatus for affecting a workpiece further comprising:

said process station, to be positioned in proximity to said apparatus for facilitating movement.

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11. An apparatus according to claim 10, wherein said process station comprises a laboratory furnace.

12. An apparatus according to claim 1, wherein said work module is configured to
25 be capable of containing a work piece that is a substrate for vapor deposition processing.

13. An apparatus according to claim 1, wherein said fluid flow comprises gas flow.

14. An apparatus according to claim 1, wherein said fluid flow comprises liquid flow.

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15. An apparatus according to claim 1, wherein said mount is length-adjustable for adjusting alignment of said work module with said process station.

16. An apparatus for containing a work piece, the apparatus comprising:

10 a housing, said housing to contain said work piece and to expose said work piece to fluid flow, an end of said housing hereinafter referred to as first end, and an end of said housing opposite said first end hereinafter referred to as second end; and

a fluid inlet and a fluid outlet, said fluid inlet and outlet externally intersecting said housing closer to said first end than to said second end;

15 wherein said housing is configured to be capable of externally receiving energy at least at a portion of said housing that is between said first and second ends, said portion of said housing being closer to said second end than are said fluid inlet and outlet.

17. An apparatus according to claim 16, further comprising a conduit, the conduit
20 including an opening into an interior defined by said housing, wherein said fluid flow includes flow through said opening, and wherein said opening is closer to said second end than are said fluid inlet and outlet.

18. An apparatus according to claim 16, wherein said portion of said housing is
25 configured to receive heat energy within a chamber of a furnace.

19. An apparatus according to claim 16, wherein said housing comprises a tube, said tube being closed at said second end of said housing.

20. An apparatus according to claim 16, wherein said tube comprises quartz.

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21. A method for producing an apparatus for containing a work piece and for directing fluid flow over said work piece during processing, the method comprising:

providing a housing that defines an interior chamber, an end and an opposite end of said housing hereinafter being referred to as first and second ends of said housing,

10 respectively, said housing having a first opening nearer said first end than said second end; and

providing a conduit connected to said housing, said conduit including a second opening that opens into said interior chamber and a third opening that opens not into said interior chamber, said third opening being nearer to said first end than to said second end;

15 wherein said fluid flow is from one of said first opening and said second opening to another of said first opening and said second opening, and one of said third and first openings is to accept input fluid and another of said third and first openings is to produce fluid output.

20 22. A method according to claim 21, wherein said fluid flow includes gas flow.

23. A method according to claim 21, wherein said housing is to comprise a tube that is capable of being heated in a tube furnace.

25 24. A method according to claim 21, wherein said housing is to comprise a quartz tube.

25. A method according to claim 24, wherein said conduit comprises a quartz member and said step of providing said conduit comprises quartz welding said quartz member to said quartz tube.

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26. An apparatus produced according to the method of claim 25.

27. An apparatus produced according to the method of claim 21.

10 28. A method for facilitating movement of an elongated housing containing a work piece into position to be affected by a process station, the method comprising:

coupling a fluid inlet of said housing to a first fluid line;

coupling a fluid outlet of said housing to a second fluid line; and

15 inserting said housing into said process station substantially along an axis of elongation of said elongated housing.

29. A method according to claim 28, wherein said inserting step is after said coupling steps.

20 30. A method according to claim 28, wherein said process station comprises a furnace that defines an elongated heat chamber, said elongated chamber having two ends and an elongated main portion in between said two ends, wherein said method further comprises:

preheating said furnace; and

25 refraining from opening said main portion of said elongated heat chamber prior to said inserting step.